## In the Claims

- 1-8. (cancelled)
- 9. (new) A piston accumulator, comprising:

an accumulator housing having gas and fluid sides therein and having a longitudinal axis;

a piston axially displaceable within said housing along said longitudinal axis and separating said gas and fluid sides in said housing, said piston being at least largely of plastic material and having a cylindrical inside wall bordering a cavity opening on said gas side of said housing; and

stiffening crosspieces within said cavity extending diametrically to said longitudinal axis and extending substantially from said longitudinal axis to said inside wall of said piston, said crosspieces having ends remote from said inside wall terminating in one of a cylindrical hollow receiving ring and of an axially extending linkage member within said separating piston.

- 10. (new) A piston accumulator according to claim 9 wherein said piston is completely of plastic material.
- 11. (new) A piston accumulator according to claim 9 wherein

said ends of said crosspieces remote from said inside wall terminate in said hollow receiving ring.

12. (new) A piston accumulator according to claim 9 wherein

at least parts of said piston comprise one of an injection molding and an extrusion; and

at least an outer periphery of said piston is reinforced by one of plastic fibers and of a plastic membrane.

- 13. (new) A piston accumulator according to claim 9 wherein said plastic material comprises glass fiber-reinforced polyaryl amide.
- 14. (new) A piston accumulator according to claim 11 wherein said stiffening crosspieces are rectangular in cross section, and extend an entire height of said cavity within said piston.
- 15. (new) A piston accumulator according to claim 9 wherein said stiffening crosspieces are rectangular in cross section, and extend an entire height of said cavity within said piston.
- 16. (new) A piston accumulator according to claim 9 wherein said piston comprises groove-shaped recesses on an outer circumferential side thereof, each for holding at least one of a guide strip and of a seal.
- 17. (new) A piston accumulator, comprising:

  an accumulator housing having gas and fluid sides therein and having a longitudinal axis;

  a piston axially displaceable within said housing along said longitudinal axis and separating said gas and fluid sides in said housing, said piston being at least largely of plastic

material and having a cylindrical inside wall bordering a cavity opening on said gas side of said housing; and

stiffening crosspieces within said cavity extending diametrically to said longitudinal axis, extending substantially from said longitudinal axis to said inside wall of said piston, being rectangular in cross section, and extending an entire height of said cavity within said piston.

- 18. (new) A piston accumulator according to claim 17 wherein said piston is completely of plastic material.
- 19. (new) A piston accumulator according to claim 17 wherein at least parts of said piston comprise one of an injection molding and an extrusion; and at least an outer periphery of said piston is reinforced by one of plastic fibers and of a plastic membrane.
  - 20. (new) A piston accumulator according to claim 17 wherein said plastic material comprises glass fiber-reinforced polyaryl amide.
- 21. (new) A piston accumulator according to claim 17 wherein said piston comprises groove-shaped recesses on an outer circumferential side thereof, each for holding at least one of a guide strip and of a seal.